

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 13-24 are presently pending in the application. Since no new issues are presented, it is respectfully requested that the Examiner enter the response on the record. No new matter is presented.

In the outstanding Official Action, Claims 13-18, 21 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable Ota (U.S. Patent No. 6,016,134) in view of Suzuki et al. (U.S. Patent No. 5,029,985, hereinafter Suzuki). Claims 19-20 and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ota as modified by Suzuki and in further view of Funada et al. (U.S. Patent No. 4,610,510, hereinafter Funada). Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ota modified by Suzuki and in further view of Tuma et al. (U.S. Patent No. 6,146,446, hereinafter Tuma).

The Official Action has rejected Claims 13-18, 21 and 23 under 35 U.S.C. § 103 as being unpatentable over Ota in view of Suzuki. The Official Action cites Ota as disclosing the Applicants' invention with the exception of using a double sided adhesive film. The Official Action cites Suzuki as disclosing the use of a double sided adhesive film to join two layers together and states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to arrive at the Applicants' claims. Applicants respectfully traverses this rejection.

The present invention relates to a liquid crystal display screen that is constructed with the reinforced structure so as to resist the effects of mechanical stress placed on the screen. An exemplary embodiment of the present invention includes liquid crystal enclosed between a TFT plate and a back plate electrode which are bonded to one another by a bead of cement.

The TFT plate is reinforced by a reinforcing plate which is attached to the TFT plate using a double sided adhesive film.

Claim 13 recites, *inter alia*, a liquid crystal display screen, comprising:

“a first transparent plate and a second transparent plate, joined together and between which is contained liquid crystal, the first plate being mechanically reinforced by an at least partially transparent third plate, wherein the first and the third plates are secured together by way of an adhesive element comprising at least one double-sided adhesive film.”

Ota describes a liquid crystal display device having a transparent input touch panel

(1). Ota describes that a transparent sheet layer (2) is placed between a touch panel (1) and what is believed to be an LCD display element 51. Ota's description never indicates the substance of element 51, however similar element 50 is described as an LCD as to Figures 1. and 2.¹ The touch panel (1) is attached to the apparent LCD element 51 of two parts (as illustrated in Figure 4) using a plurality of adhesive layers (10, 11). As seen in Figure 4, the adhesive layer (10, 11) and a transparent sheet layer (2) are placed in between the touch panel (1) and the apparent liquid crystal element 51 of only two layers.

The requirements for a *prima facie* case of obviousness are (1) there must be some suggestion or motivation in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine the reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art reference much teach or suggest all the claim limitations. It is respectfully submitted that the outstanding action fails to make a *prima facie* case of obviousness, because Ota, even if combined with Suzuki, fails teach or suggest all the limitations recited in Claim 13.

Claim 1 recites “a first transparent plate and a second transparent plate, joined together and between which is contained liquid crystal.” In contrast, Ota's description describes an LCD panel (50) and a touch panel (1), joined together and between which is

¹ Ota at Col. 3, lines 2. Note, however, 50 has four layers (50A-D) not just 2 as with element 51.

contained a transparent sheet layer (2) not containing liquid crystal. Ota does not describe that liquid crystal is between two transparent plates, but alternatively the liquid crystal (50) is on the outer portion of the device and is only bordered by a transparent layer on one side. Therefore, Ota fails to teach or suggest a structure in which a first transparent plate and a second transparent plate are joined together with liquid crystal existing between the two layers, as recited in Claim 13. Note that only layer 50A of the LCD panel 50 is described and that this layer is said to be a polarizing plate.

Furthermore, the Official Action argues that Ota teaches a “first and second transparent plate 51, joined together and between which is contained light crystal.” As discussed above, Ota fails to address the nature of element “51” in his disclosure. Therefore, it cannot be reasonably extrapolated that element 51 contains a first and second transparent plate joined together between which is light crystal. Moreover, element 51 in Ota depicts only two layers of material as noted above, and, therefore, cannot be said to teach a first and second transparent plate as well as a third liquid crystal layer.

Claim 13 also recites that the “first plate being mechanically reinforced by an at least partially transparent third plate”. The Official Action asserts that the touch panel (1) serves as the mechanically reinforcing third plate. Ota specifically states that “the territory corresponding to the effective area of touch panel (1) and the screen area of LCD display panel (50) may not be adhesive or may have weak adhesive strength, so materials which satisfy requirements of transparency and elasticity, and so forth required for the transparent sheet layers (2) can be widely selected.”² Therefore, it is clear that Ota does not teach or suggest that the touch panel (1) serves as a mechanically reinforcing member as recited in Claim 1. In contrast, Ota’s touch panel (1) is configured to have a substantial amount of elasticity to satisfactorily function as a touch-screen device.

² Ota at column 3, lines 22-26.

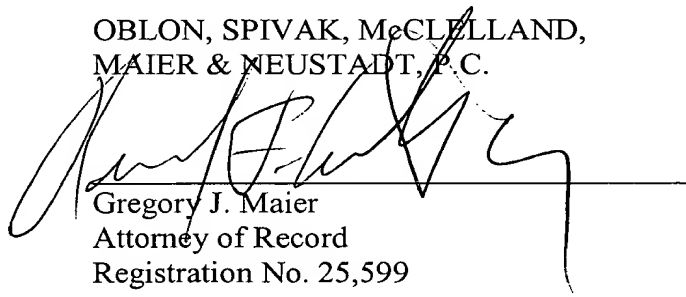
Accordingly, Applicants respectfully request that the rejection to Claim 13 under 35 U.S.C. § 103(a) be withdrawn.

As discussed above, Ota does not disclose or suggest all of the elements of the pending claims. Further, Suzuki does not satisfy the deficiencies discussed above. Thus, none of the cited references, either alone or in combination can be properly asserted as disclosing or suggesting Applicant's Claims 14-24, which include the above distinguished limitations by virtue of their dependency. Therefore, the Official Action does not provide a *prima facie* case of obviousness with regard to Claims 14-24.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 13-24 is patentably distinguishing over the prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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